

CONTROLLED SERVER LOADING
USING L4 DISPATCHING

Abstract of the Disclosure

Standalone and cluster-based servers, including Web servers, control the amount of data processed concurrently by such servers to thereby control server operating performance. A dispatcher is preferably interposed between clients and one or more back-end servers, and preferably monitors the performance of each back-end server (either directly or otherwise). For each back-end server, the dispatcher preferably also controls, in response to the monitored performance, either or both the number of concurrently processed data requests and the number of concurrently supported connections to thereby control the back-end servers' performance. In one embodiment, the dispatcher uses a packet capture library for capturing packets at OSI layer 2 and implements a simplified TCP/IP protocol in user-space (vs. kernel space) to reduce data copying. Commercially off-the-shelf (COTS) hardware and operating system software are preferably employed to take advantage of their price-to-performance ratio.

With COTS hardware and software, the system can be implemented in a cost-effective manner.